

Work Order ID 140869***140869***

Page 1

Thursday, January 21, 2016 12:48:00 PM

Item ID: D206-642-451

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Replacement Skidtube, High Gear with Run-on Landing Wearplates Fits LH or RH

Start Date: 1/21/2016 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 2/5/2016 Req'd Qty: 1.00 ***1***

Customer:

Reference: REWORK REPLACE FWD WEARPLATE D4366-041

Approvals: Process Plan: *M* Date: 16-1-21

Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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D4361-043

A

IIN-D206-642

Q

105

0.00

105

HandFinish

Memo

0.00

Hand Finishing

PULL FROM STOCK
D206-642-451 X1
B:108926REPLACE FWD WEARPLATE
D4366-041

115

QC5- Inspect part completeness to step on W/O 0.00

115

QC

Memo

0.00

Quality Control

1 *M* 16-1-21*Cancel*

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐				
Misidentified ☐	Past Due ☐	OTHER : ☐			

Work Order ID 140869***140869***

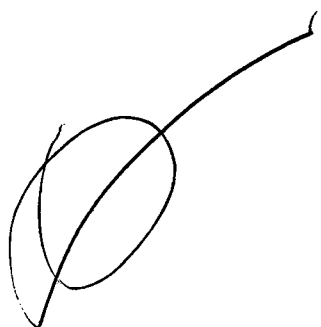
Page 2

Thursday, January 21, 2016 12:48:00 PM

Item ID: D206-642-451 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Replacement Skidtube, High Gear with Run-on Landing Wearplates Fits LH or RH
Start Date: 1/21/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 2/5/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference: REWORK REPLACE FWD WEARPLATE D4366-041

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
125		0.00							
125									
Packaging	Memo	0.00							
Packaging	REPACKAGE UNDER NEW BATCH NUMBER								
	NEW LABLES								
260	QC21- Final Inspection - Work Order Release	0.00							
260									
QC	Memo	0.00							
Quality Control									



DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Thursday, January 21, 2016 12:48:53 PM

1 40869

Parent Item: D206-642-451

D206-642-451

Parent Item Name: Replacement Skidtube,High Gear with Run-on Landing Wearplates Fits LH or RH

Start Date: 1/21/2016

Required Date: 2/5/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A NEW ISSUE 13-06-13 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D206-642-451		Manufactured	No				Each	0.0000		1			
D206-642-451													
Replacement Skidtube,High Gear with Run-on Landing Wearplates Fits LH or RH													
D4366-041		Manufactured	No				Each	0.0000		1			
D4366-041													
Run-on Landing Wearplate Fwd													

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval	
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : ☐						
Misidentified ☐	☐	Past Due ☐							

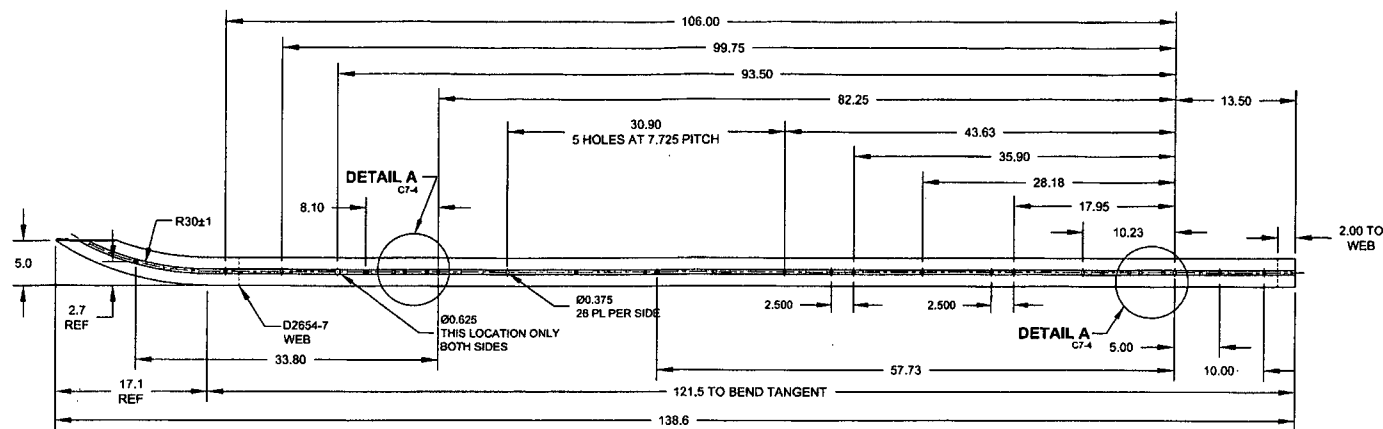
QTY -041	QTY -043	PART NUMBER	DESCRIPTION
X		D4361-041	SKIDTUBE ASSY
	X	D4361-043	SKIDTUBE ASSY
1	1	D2600-1-160	EXTRUSION
1		D2654-5	WEB
	1	D2654-7	WEB
1	1	D2646	AFT CAP
1	1	D2647	CAP
23	26	D2649	CROSS BOLT SPACER
4	8	D2651-1	PLUG
4	8	D2651-3	O-RING
1	1	D2680-041	NUT PLATE
18	20	D3873-1	BUSHING
1		D4364-041	FWD WEARPLATE ASSY
1		D4364-043	AFT WEARPLATE ASSY
	1	D4366-041	FWD WEARPLATE ASSY
	1	D4366-043	AFT WEARPLATE ASSY
9	10	AN3-36A	BOLT
9	10	NAS1149C0332R	WASHER (OR AN960C10L)
9	10	MS21042-3	NUT
2	2	NAS1149D0332J	WASHER (OR AN960JD10L)
2	2	CCR264SS3-3	RIVET
2	2	CR3212-4-03	RIVET
2	2	MS27039-1-08	SCREW
1	1	MS27039-4-06	SCREW
1	1	NAS1149D0463J	WASHER (OR AN960JD416)

NOTES:

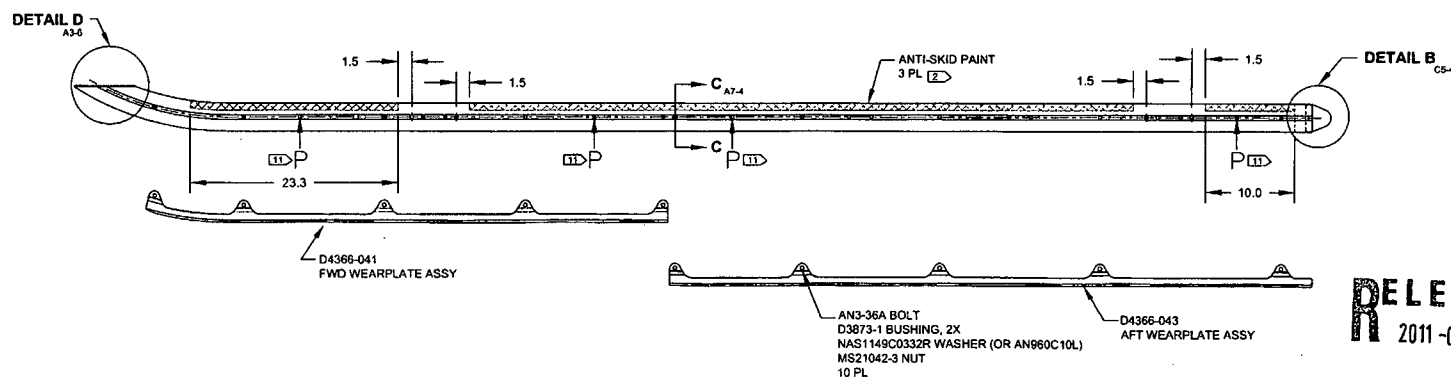
- MATERIAL: N/A
- FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSTALLING D2654-5/-7 WEB
-POWDER COAT WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
-BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- IDENTIFICATION: NONE
- WEIGHT: D4361-041 = 37.5 LBS
D4361-043 = 44.3 LBS
- WELD PER DART QSI 004
- DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE.
A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)

RELEASED
R 2011-09-12
JWP

A	NEW ISSUE	SC	11.05.05
REV.	DESCRIPTION	BY	DATE
DESIGN	SC	DART AEROSPACE USA, INC	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED	97	DRAWING NO.	REV. A
MFG. APPR.	8	D4361	SHEET 1 OF 4
APPROVED	10	TITLE	SCALE
DE APPR.	11	206L/407 SKIDTUBE ASSEMBLIES	NTS
DATE	11.05.05	COPYRIGHT © 2011 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC	



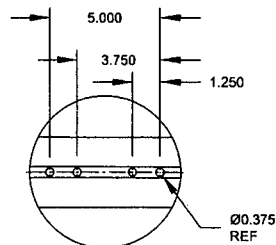
D4361-043 BENDING/DRILL DETAIL



D4361-043 ASSEMBLY/FINISHING DETAIL

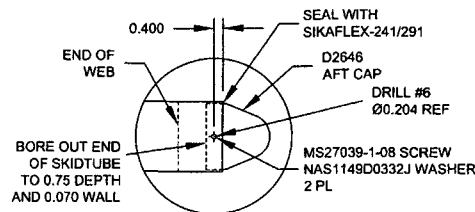
RELEASED
R 2011-09-12

DESIGN	SC	DART AEROSPACE USA, INC	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED	97	DRAWING NO.	REV. A
MFG. APPR.	8	D4361	SHEET 3 OF 4
APPROVED	140	TITLE	SCALE
DE APPR.	4	206L/407 SKIDTUBE ASSEMBLIES	NTS
DATE	11.05.05	COPYRIGHT © 2011 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	



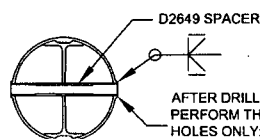
DETAIL A

C3-2
D7-2
C3-3
D6-3



DETAIL B

B2-2
B1-3



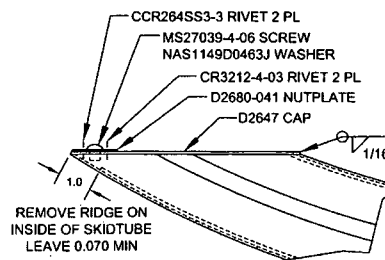
AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.375
HOLES ONLY:
1. CHAMFER HOLE 0.030 X 45°
2. INSERT D2649 SPACER
3. WELD INTO PLACE AND GRIND FLUSH
4. CBORE TO Ø0.313 X 0.75 DP

SECTION C-C

FOR Ø0.375 HOLES
ONLY

B4-2
B5-3

ORIENTATION OF
D2680-041



DETAIL D

B7-2
B7-3

DETAIL D NOTES:

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D2647 (TRIM AS NECESSARY)
4. WELD D2647 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D2680-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D2680-041 PRIOR TO FINISH

RELEASED
2011-09-12

DESIGN	SC	DART AEROSPACE USA, INC	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED	JP	DRAWING NO.	REV. A
MFG. APPR.	JP	D4361	SHEET 4 OF 4
APPROVED	JP	TITLE	SCALE
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